the Isoptera (with the Zoraptera) and Dermaptera is so evenly divided between the Blattoid and Plecopteroid groups that it is only after careful consideration that one can make up his mind where to place them. On the other hand, such strongly aberrant forms as the Thysanoptera and Strepsiptera are also extremely difficult to place, and until more is known of the embryology, internal anatomy, and further anatomical details of these forms than is at present available as evidence for determining their closest affinities, the groupings here proposed must be regarded as purely provisional, and subject to further revision in the light of subsequent investigation. It may be stated, however, that none of the facts thus far brought forward would indicate that the views here proposed are untenable, and a further study of the forms in question has in each case merely served to confirm the correctness of the conclusions concerning the groupings here proposed.

## PROCEEDINGS OF THE CAMBRIDGE ENTOMO-LOGICAL CLUB

At the meeting June 8, 1920, Mr. Parker of the U. S. Entomological Laboratory at Arlington, Mass., gave an account of the effect of the hymenopterous egg parasite, *Trichogramma minutum* on the European corn-borer in this country. Last year 28,000 eggs of the corn-borer were examined and 43 per cent. were found parasitized by Trichogramma. Collecting notes were read by several members and notice was given of expected appearance of the periodical Cicada at several localities in Massachusetts, Connecticut and Rhode Island. It was voted to hold the next meeting on the second Tuesday in September.

At the meeting of September 14, 1920, Mr. C. W. Johnson read a paper on the New England brood of the periodical Cicada and its failure to appear this year. Mr. Johnson had visited the place near the Logue reservoir in Washington, R. I., where the insect was found in large numbers in 1903 as described by A. S. Packard in Psyche for December of that year, but found none. He read a letter from Mr. George Dimmock who visited the place at Suffield, Conn., where he had collected the Cicada in 1869 and found none at this time. Inquiries were made and letters received from the following places where the insect was seen in 1903 without any

appearance of them this year: Freetown, Mass., near Fall River, Russell, Mass., Tolland, Conn., State Line near Monson, Mass. Mr. Johnson concludes that the brood has become extinct.

Mr. J. H. Emerton spoke of a visit to the summit of Mt. Washington during the first week of July. Two new species of spiders were found under small stones at about 5,000 feet elevation.

Mr. L. W. Swett said that he and Mr. S. E. Cassino had visited Mt. Washington as early as May 28 and again in August and found many rare lepidoptera.

Mr. C. V. Blackburn showed a gynandromorph of the Gypsy Moth with the right side male and left side female, each half with the usual size and colors of its sex.

At the meeting of October 12, 1920, R. Heber Howe, Jr., mentioned the finding of eight species of Dragon-flies new to New England and showed maps giving their known distribution in North America.

Prof. W. M. Wheeler gave an account of his visit last summer to the station of the New York Zoölogical Society 50 miles up the Essequibo River in the forests of British Guiana. One of the great sources of entomological interest was a leguminous tree, Tachigalia, with long pinnate leaves in the hollow petioles of which live great numbers of Coccids, the excretions of which attract swarms of ants and other insects, including a social beetle, and these insects draw around them dipterous and hymenopterous parasites of many kinds. As these trees become larger and their wood harder they become the homes of great colonies of ants.

Dr. Wheeler found one morning a decayed tree filled with a great colony of the ant *Eciton burchelli*. As they were driven out by smoke, clusters of them held together around large cocoons containing male pupe. The colony finally settled in two large masses in each of which was a freshly matured female. Specimens of the ants were exhibited.

Collecting notes were read and discussed by several members.

Mr. A. F. Burgess, Secretary of the Association of Economic Entomologists, said that enough copies of the Record of Economic Entomology to 1915 had been sold to pay the expense of printing and he was now soliciting subscriptions to a supplementary volume bringing the record up to 1920, the manuscript of which was ready to publish.